



Governor

Lori F. Kaplan
Commissioner

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live.

100 North Senate Avenue
P. O. Box 6015
Indianapolis, Indiana 46206-

6015
April 1, 2003

(317) 232-8603
(800) 451-6027
www.IN.gov/idem

Mr. Nicholas Schroeder
TEPPCO Indianapolis Terminal
P.O. Box 34318
Indianapolis, Indiana 46234

Re: Registered Construction and Operation Status
063-7788-00035

Dear Mr. Schroeder:

The application from TEPPCO Indianapolis Terminal, received on December 13, 1996 has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-5.5, it has been determined that the operation of this bulk petroleum product storage terminal, located at 10731 East County Road 300 North, Indianapolis, Indiana, is classified as registered. This stationary source consists of the following emission units and pollution control devices:

- (a) Three (3) external floating roof tanks (ID NOs. 5101, 5103 and 5105), each storing natural gasoline, gasoline, Jet A Kerosene, Diesel and similar low VP product, each with a maximum capacity of 2,814,000 gallons, and each exhausting at one (1) emission point identified as 01, 03 and 05, respectively (each originally constructed in 1957).
- (b) Two (2) vertical fixed roof cone tanks (ID NOs. 5102 and 5104), each storing Jet A Kerosene, Diesel and similar low vapor pressure (VP) product, each with a maximum capacity of 2,843,568 gallons, and each exhausting at one (1) emission point identified as 02 and 04, respectively (each originally constructed in 1957).
- (c) Two (2) internal floating roof tanks (ID NOs. 5161 and 5162), storing transmix, gasoline, Jet A Kerosene, Diesel and similar low VP product, each with a maximum capacity of 84,000 gallons, and each exhausting at one (1) emission point identified as 06 and 07, respectively (each originally constructed in 1957).
- (d) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids.
- (e) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment.
- (f) Purge double block and bleed valves.
- (g) One (1) propane or butane fired flare used during emergency and non-routine maintenance activities with negligible emissions.
- (h) Two (2) 1,977 bbl (83,034 gallon) fixed roof storage tanks for storing water that accumulates in the petroleum storage tanks.

The following conditions shall be applicable:

- (1) Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative

Permit Reviewer: AY/EVP

Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
 - (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.
- (2) Pursuant to 326 IAC 8-4-3, Tank Nos. 5101, 5103, 5105, 5161 and 5162 are subject to the following:
- (a) The facility must be retrofitted with an internal floating roof equipped with a closure seal, or seals, to close the space between the roof edge and tank wall unless the source has been retrofitted with equally effective alternative control which has been approved.
 - (b) The facility is maintained such that there are no visible holes, tears, or other openings in the seal or any seal fabric or materials.
 - (c) All openings, except stub drains, are equipped with covers, lids, or seals such that:
 - (1) the cover, lid, or seal is in the closed position at all times except when in actual use;
 - (2) automatic bleeder vents are closed at all times except when the roof is floated off or landed on the roof leg supports;
 - (3) rim vents, if provided are set to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting.

Additionally, pursuant to 326 IAC 8-4-3, the Permittee shall maintain records including the following:

- (d) The types of volatile petroleum liquids stored.
- (e) The maximum true vapor pressure.
- (f) Records of the inspections.

This registration is the third air approval issued to this source. All previous approvals are superceded as they have been included in this registration. The source may operate according to 326 IAC 2-5.5.

An authorized individual shall provide an annual notice to the Office of Air Quality that the source is in operation and in compliance with this registration pursuant to 326 IAC 2-5.5-4(a)(3). The annual notice shall be submitted to:

Compliance Data Section
Office of Air Quality
100 North Senate Avenue
P.O. Box 6015
Indianapolis, IN 46206-6015

no later than March 1 of each year, with the annual notice being submitted in the format attached.

Permit Reviewer: AY/EVP

An application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Quality (OAQ) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

Sincerely,

Original signed by Paul Dubenetzky

Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

Attachments

AY/EVP

cc: File - Hendricks County
Hendricks County Health Department
Air Compliance - Jim Thorpe
Permit Tracking - Janet Mobley
Technical Support and Modeling - Michele Boner

Registration

This form should be used to comply with the notification requirements under 326 IAC 2-5.5-4(a)(3)

Company Name:	TEPPCO Indianapolis Terminal
Address:	10731 East County Road 300 North
City:	Indianapolis
Authorized individual:	Nicholas Schroeder
Phone #:	(317) 293-1347
Registration #:	063-7788-00035

I hereby certify that TEPPCO Indianapolis Terminal is still in operation and is in compliance with the requirements of Registration 063-7788-00035.

Name (typed):
Title:
Signature:
Date:

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Registration

Source Background and Description

Source Name: TEPPCO Indianapolis Terminal
Source Location: 10731 East County Road 300 North, Indianapolis, IN 46234
County: Hendricks
SIC Code: 4613
Operation Permit No.: R063-7788-00035
Permit Reviewer: Adeel Yousuf / EVP

The Office of Air Quality (OAQ) has reviewed a Registration application from TEPPCO relating to the operation of a petroleum products storage terminal.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

- (a) Three (3) external floating roof tanks (ID NOs. 5101, 5103 and 5105), each storing natural gasoline, gasoline, Jet A Kerosene, Diesel and similar low VP product, each with a maximum capacity of 2,814,000 gallons, and each exhausting at one (1) emission point identified as 01, 03 and 05, respectively (each originally constructed in 1957).
- (b) Two (2) vertical fixed roof cone tanks (ID NOs. 5102 and 5104), each storing Jet A Kerosene, Diesel and similar low vapor pressure (VP) product, each with a maximum capacity of 2,843,568 gallons, and each exhausting at one (1) emission point identified as 02 and 04, respectively (each originally constructed in 1957).
- (c) Two (2) internal floating roof tanks (ID NOs. 5161 and 5162), storing transmix, gasoline, Jet A Kerosene, Diesel and similar low VP product, each with a maximum capacity of 84,000 gallons, and each exhausting at one (1) emission point identified as 06 and 07, respectively (each originally constructed in 1957).
- (d) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids.
- (e) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment.
- (f) Purge double block and bleed valves.
- (g) One (1) propane or butane fired flare used during emergency and non-routine maintenance activities with negligible emissions.
- (h) Two (2) 1,977 bbl (83,034 gallon) fixed roof storage tanks for storing water that accumulates in the petroleum storage tanks.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities operating at this source during this review process.

Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

- (1) OP-063-00028 (B) , issued on February 22, 1995; and
- (2) Registration letter for Tanks 5161 and 5162, issued on December 7, 1981.

All conditions from previous approvals were incorporated into this Registration.

Enforcement Issue

There are no enforcement actions pending.

Stack Summary

Stack ID	Operation	Tank Height (feet)	Tank Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
01	Tank 5101	48	100	4712	Ambient
02	Tank 5102	40	110	5701	Ambient
03	Tank 5103	48	100	4712	Ambient
04	Tank 5104	40	110	5701	Ambient
05	Tank 5105	48	100	4712	Ambient
06	Tank 5161	32	21.25	213	Ambient
07	Tank 5162	32	21.25	213	Ambient

Recommendation

The staff recommends to the Commissioner that the Registration be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on December 13, 1996, with additional information received on November 3, 1998 and November 27, 2002.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (four (4) pages).

Potential To Emit (of Source or Revision) Before Controls

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency.”

Pollutant	Potential To Emit (tons/year)
PM	0.00
PM-10	0.00
SO ₂	0.00
VOC	11.90
CO	0.00
NO _x	0.00

HAP's	Potential To Emit (tons/year)
Benzene	0.70
Toluene	0.48
Ethylbenzene	0.08
Xylenes	0.21
Hexane	0.47
MTBE	0.12
TOTAL	2.06

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of VOC is equal to or greater than 10 tons per year and less than 25 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-5.1-2.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and/or the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is less than twenty five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-5.1-2.
- (c) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the volatile organic compound (VOC) emissions are not counted toward determination of PSD.

County Attainment Status

The source is located in Hendricks County.

Pollutant	Status
PM-10	attainment

SO ₂	attainment
NO ₂	attainment
Ozone	attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Hendricks County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Fugitive Emissions
Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2, 40 CFR 52.21, or 326 IAC 2-3 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Source Status

Existing Source PSD Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (ton/yr)
PM	0.00
PM10	0.00
SO ₂	0.00
VOC	11.90
CO	0.00
NO _x	0.00
Single HAP	0.48
Total HAPs	2.06

- (a) This existing source is **not** a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not in one of the 28 listed source categories.

Limited Potential to Emit

The table below summarizes the total potential to emit, reflecting all limits, of the significant and insignificant emission units.

	Limited Potential to Emit (tons/year)						
Process/facility	PM	PM-10	SO ₂	VOC	CO	NO _x	HAPs

Storage Tanks (5101 - 5105, 5161 and 5162)	--	--	--	11.77	--	--	0.70 (single) 2.06 (total)
Process fugitive emissions	--	--	--	0.13	--	--	0.02 (single) 0.06 (total)
Total Emissions	0.00	0.00	0.00	11.90	0.00	0.00	0.72 (single) 2.12 (total)

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source, including the emissions from this permit R063-7788-00028, is still not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than 100 tons per year,
- (b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
- (c) any combination of HAPs is less than 25 tons/year.

This status is based on all the air approvals issued to the source. This status has been verified by the OAQ inspector assigned to the source.

Federal Rule Applicability

- (a) Storage tanks identified as 5101, 5102, 5103, 5104, 5105, 5161 and 5162 are not subject to the New Source Performance Standard, 326 IAC 12, (40 CFR Parts 60.110, 110a-115a or 110b-117b, Subparts K, Ka and Kb), because these tanks were all constructed in 1957, prior to the earliest applicability date of June 11, 1973 for Subpart K, Ka or Kb.

Note:

- (1) *Tanks 5102 and 5104 were both originally constructed in 1957 and have not been modified since the date of construction. Therefore, tanks 5102 and 5104 were deemed not to be subject to the New Source Performance Standards, 326 IAC 12, (40 CFR Parts 60.110, 110a-115a or 110b-117b, Subparts K, Ka and Kb).*
- (2) *Tanks 5161 and 5162 were both originally constructed in 1957 as fixed cone roof tanks. These tanks were converted on August 28, 1981 to an internal floating roof with a primary mechanical shoe seal. The conversion for both tanks was authorized by IDEM and classified as registered construction and operation status. This physical change made to tanks 5161 and 5162 is not considered modification because the potential to emit did not increase.*
- (3) *Tanks 5101 and 5105 were both originally constructed in 1957 as external floating roof tanks. These tanks were equipped with secondary seals on May 28, 1982. This physical change made to tanks 5161 and 5162 is not considered modification because the potential to emit did not increase.*
- (4) *Tanks 5101, 5103 and 5105 underwent a change in service in 1996 as natural gasoline was added as one of the allowed products to be stored. However, since there was no physical and/or operational change involved, tanks 5101, 5103 and 5105 were deemed not to be subject to Subpart Kb.*

The change of service to an aboveground storage tank would only be considered a

modification under the applicable subparts of the "Standards of Performance for New Stationary Sources" (40 CFR 60, Subparts A, K, Ka, and Kb) if that change of service:

1. "increases the amount of any air pollutant (to which a standard applies) emitted into the atmosphere by that facility or which results in the emission of any air pollutant (to which a standard applies) into the atmosphere not previously emitted." (from definition of "Modification", 40 CFR 60.2) and;

2. requires a physical change to the tank, such as the installation of new seals, or an internal floating roof.

A change of service without a physical change to the tank is not considered a modification because, as stated in 40 CFR 60.14(e):

"The following shall not, by themselves, be considered modifications under this part:

(4) Use of an alternative fuel or raw material if, prior to the date any standard under this part becomes applicable to that source type... the existing facility was designed to accommodate that alternative use."

- (b) The source is not subject to the Bulk Gasoline Terminals New Source Performance Standard, 326 IAC 12, (40 CFR Part 60.500, Subpart XX), because this rule only applies to loading racks which deliver liquid products into gasoline tank trucks.
- (c) The source is not subject to the National Emissions Standards for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations) 40 CFR 63.420 (Subpart R) because the owner or operator has documented and recorded that the facility is not a major source.

State Rule Applicability - Entire Source

326 IAC 2-6 (Emission Reporting)

This source is located in Hendricks and the potential to emit VOC is less than one hundred (100) tons per year. Therefore, 326 IAC 2-6 does not apply.

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity) monitor in a six (6) hour period.

State Rule Applicability - Individual Facilities

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

The operation of this source will emit less than 10 tons per year of a single HAP or 25 tons per year of a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

326 IAC 8-1-6 (New Facilities; General Reduction Requirements)

This bulk petroleum product storage terminal is not subject to the provision of 326 IAC 8-1-6. This rule applies to facilities located in any county constructed after January 1, 1980, which are not otherwise regulated by any other provisions of 326 IAC 8, and have potential emissions of 25 tons/yr or greater. This bulk petroleum product storage terminal was constructed prior to January 1, 1980, and none of the modifications to tanks 5101, 5102, 5103, 5104, 5105, 5161 and 5162 resulted in VOC emissions increase greater than 25 tons per year, therefore, this rule does not apply.

326 IAC 8-4-1 (Applicability: Petroleum Sources)

All sections of rule 326 IAC 8-4 apply to petroleum sources located in Hendricks county.

326 IAC 8-4-2 (Petroleum Refineries)

The source is not subject to the requirements of 326 IAC 8-4-2 (Petroleum Refineries), because this source is not a Petroleum Refinery.

326 IAC 8-4-3 (Petroleum Liquid Storage Facilities)

Petroleum liquid storage tanks (ID Nos. 5101, 5103, 5105, 5161 and 5162), each with a capacity greater than 39,000 gallons containing volatile organic liquid whose true vapor pressure is greater than 1.52 pounds per square inch (psi) are subject to the requirements of 326 IAC 8-4-3 (Petroleum Liquid Storage Facilities). Storage tanks ID Nos. 5102 and 5104, each store petroleum liquid whose true vapor pressure is less than 1.52 psi and therefore, not subject to the rule.

Pursuant to 326 IAC 8-4-3, Tanks 5101, 5103, 5105, 5161 and 5162 are subject to the following:

- (a) The facility must be retrofitted with an internal floating roof equipped with a closure seal, or seals, to close the space between the roof edge and tank wall unless the source has been retrofitted with equally effective alternative control which has been approved.
- (b) The facility is maintained such that there are no visible holes, tears, or other openings in the seal or any seal fabric or materials.
- (c) All openings, except stub drains, are equipped with covers, lids, or seals such that:
 - (1) the cover, lid, or seal is in the closed position at all times except when in actual use;
 - (2) automatic bleeder vents are closed at all times except when the roof is floated off or landed on the roof leg supports;
 - (3) rim vents, if provided are set to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting.

Additionally, pursuant to 326 IAC 8-4-3, the Permittee shall maintain records including the following:

- (d) The types of volatile petroleum liquids stored.
- (e) The maximum true vapor pressure.
- (f) Records of the inspections.

Tanks 5101, 5103 and 5105, each with external floating roof and tanks 5161 and 5162, each with

internal floating roof, are in compliance with this rule.

326 IAC 8-4-4 (Bulk Gasoline Terminal)

This source is not subject to the requirements of this rule because the source does not load any gasoline and is therefore, not a bulk gasoline terminal.

326 IAC 8-4-5 (Bulk Gasoline Plants)

The source is not subject to the requirements of 326 IAC 8-4-5 (Bulk Gasoline Plants) since the source does not meet the definition of a bulk gasoline plant, which requires a daily gasoline throughput of less than 20,000 gallons per day.

326 IAC 8-4-6 (Gasoline Dispensing Facilities)

Section 6 of 326 IAC 8-4 applies to any gasoline storage tank installed after July 1, 1989, at a gasoline dispensing facility. The source is not subject to the requirements of 326 IAC 8-4-6 (Gasoline Dispensing Facilities), because the source does not dispense gasoline into motor vehicle fuel tanks or portable containers and is not a gasoline dispensing facility.

326 IAC 8-4-7 (Gasoline Transports)

This source is not subject to the requirements of 326 IAC 8-4-7 (Gasoline Transports), because the source has no gasoline transport or loading rack. All products are transported through pipelines.

326 IAC 8-4-8 (Leaks from Petroleum Refineries; Monitoring; Reports)

The source is not subject to the requirements of 326 IAC 8-4-8 (Leaks from petroleum refineries; monitoring; reports), because this source is not a Petroleum Refinery.

326 IAC 8-4-9 (Leaks from Transports and Vapor Collection Systems)

Pursuant to 326 IAC 8-4-9, sources subject to the requirements of 326 IAC 8-4-4 through 326 IAC 8-4-6 are also subject to the requirements of 326 IAC 8-4-9 (Leaks from Transports and Vapor Collection Systems). Since the source is not subject to these rules, the requirements of this rule do not apply.

326 IAC 8-6 (Organic Solvent Emission Limitations)

Pursuant to 326 IAC 8-6-1, the requirements of this rule apply to sources commencing operation after October 7, 1974 and prior to January 1, 1980, located anywhere in the state, with potential VOC emissions of 100 tons per year or more, and not regulated by any other provision of Article 8. This source commenced operation prior to October 7, 1974, therefore, this rule does not apply.

326 IAC 8-7 (Specific VOC Reduction Requirements for Lake, Porter, Clark and Floyd Counties)

The source is not subject to the requirements of 326 IAC 8-7 (Specific VOC Reduction Requirements for Lake, Porter, Clark and Floyd Counties), because this source is not located in one of the listed counties.

326 IAC 8-9 (Volatile Organic Liquid Storage Vessels)

The source is not subject to the requirements of 326 IAC 8-9 (Volatile Organic Liquid Storage Vessels) because this source is not located in one of the listed counties and was constructed prior to January 1, 1980.

There are no other 326 IAC 8 rules that apply to this source.

Conclusion

The operation of this of this bulk petroleum product storage terminal shall be subject to the conditions of the attached proposed Registration 063-7788-00035.

**Appendix A: Emission Calculations
Process Fugitive Emissions**

Company Name: TEPPCO Indianapolis Terminal
Address City IN Zip: 10731 East County Road 300 North, Indianapolis, IN 46234
Operating Permit No.: 063-7788-00035
Reviewer: Adeel Yousuf/EVP
Date: January 2, 2003

Fugitive VOC emissions

Component Type	Service	Avg. Emission Factor (lb/hr-component)	Quantity*	VOC Emissions (lb/hr)	VOC Emissions (tons/yr)
Flange/Screwed	Light Liquid	1.76E-05	239	0.004	0.02
Connections	Heavy Liquid	Negligible	0	Negligible	Negligible
Valves	Light Liquid	9.48E-05	102	0.010	0.04
	Heavy Liquid	Negligible	0	Negligible	Negligible
Pump Seals	Light Liquid	1.19E-03	13	0.015	0.07
	Heavy Liquid	Negligible	0	Negligible	Negligible
Sample Ports	Light Liquid	2.87E-04	5	0.001	0.01
	Heavy Liquid	Negligible	0	Negligible	Negligible
Total				0.031	0.13

Note: Emission factors are taken from: U.S. EPA. Office of Air Quality Planning and Standards. Protocol for Equipment Leak Emission Estimates.
 (Research Triangle Park, NC: U.S. EPA EPA-453/R-95-017, 1995). Table 2-3

Fugitive HAP emissions

Component Type	VOC Emissions Tons/yr	Vapor Weight Percent						Total
		Benzene	Toluene	Ethyl-Benzene	Xylenes	Hexane	MTBE	
Transmix, Gasln, Jet A, Diesel and low VP	N/A	16.70%	9.84%	1.94%	4.45%	9.17%	1.30%	
Jet A, Diesel and similar low VP	N/A	16.70%	9.84%	1.94%	4.45%	9.17%	0.00%	
Nat. Gasln, Gasln, Jet A, Diesel and low VP	N/A	0.90%	1.30%	0.10%	0.50%	1.60%	1.30%	
Total Fugitives	0.13	0.02	0.01	0.00	0.01	0.01	0.00	
Total		0.02	0.01	0.00	0.01	0.01	0.00	0.06

* All components are conservatively assumed to be in light liquid service.
 Worst case vapor weight percent is used to calculate emissions for each HAP.

Appendix A: Emission Calculations

Company Name: TEPPCO Indianapolis Terminal
Address City IN Zip: 10731 East County Road 300 North, Indianapolis, IN 46234
Operating Permit No.: 063-7788-00035
Reviewer: Adeel Yousuf/EVP
Date: January 2, 2003

Total Potential To Emit (tons/year)			
Emissions Generating Activity			
Pollutant	Storage Tanks	Process Fugitive Emissions	TOTAL
PM	0.00	0.00	0.00
PM10	0.00	0.00	0.00
SO2	0.00	0.00	0.00
NOx	0.00	0.00	0.00
VOC	11.77	0.13	11.90
CO	0.00	0.00	0.00
total HAPs	2.06	0.06	2.12
worst case single HAP	(Benzene) 0.70	(Benzene) 0.02	(Benzene) 6.06
Total emissions based on rated capacities at 8,760 hours/year.			
Controlled Potential To Emit (tons/year)			
Emissions Generating Activity			
Pollutant	Storage Tanks	Process Fugitive Emissions	TOTAL
PM	0.00	0.00	0.00
PM10	0.00	0.00	0.00
SO2	0.00	0.00	0.00
NOx	0.00	0.00	0.00
VOC	11.77	0.13	11.90
CO	0.00	0.00	0.00
total HAPs	2.06	0.06	2.12
worst case single HAP	(Benzene) 0.70	(Benzene) 0.02	(benzene) 6.06
Total emissions based on rated capacities at 8,760 hours/year.			

Appendix A: Emission Calculations
Tank VOC Emissions - Maximum PTE

Company Name: TEPPCO Indianapolis Terminal
Address City IN Zip: 10731 East County Road 300 North, Indianapolis, IN 46234
Operating Permit No.: 063-7788-00035
Reviewer: Adeel Yousuf/EVP
Date: January 2, 2003

Tank Number	Product Stored	Losses (Tons per Year)						Total VOC
		Working	Breathing	Withdrawal	Rim Seal	Deck Fitting	Deck Seam	Tons/yr
5101	Nat. Gasln, Gasln, Jet A, Diesel and low VP	--	--	0.19	1.94	0.54	0.00	2.67
5102	Jet A, Diesel and similar low VP	1.23	0.21	--	--	--	--	1.44
5103	Nat. Gasln, Gasln, Jet A, Diesel and low VP	--	--	0.19	1.94	0.54	0.00	2.67
5104	Jet A, Diesel and similar low VP	1.23	0.21	--	--	--	--	1.44
5105	Nat. Gasln, Gasln, Jet A, Diesel and low VP	--	--	0.19	1.94	0.53	0.00	2.66
5161	Transmix, Gasln, Jet A, Diesel and low VP	--	--	0.01	0.21	0.23	0.00	0.45
5162	Transmix, Gasln, Jet A, Diesel and low VP	--	--	0.01	0.21	0.23	0.00	0.45
Total VOC		2.47	0.41	0.60	6.23	2.06	0.00	11.77

Notes:

All storage tank emissions estimated using USEPA's Tanks 4.09b software program and are based on the estimated maximum annual throughput for each tank.
All annual tank throughputs based on 73 turnovers (once every 5 days) except tanks 5161 & 5162 = 24.

**Appendix A: Emission Calculations
Tank HAP Emissions - Maximum PTE**

Company Name: TEPPCO Indianapolis Terminal
Address City IN Zip: 10731 East County Road 300 North, Indianapolis, IN 46234
Operating Permit No.: 063-7788-00035
Reviewer: Adeel Yousuf/EVP
Date: January 2, 2003

Standing Losses

Tank Number	Product Stored	VOC Emissions Tons/yr	Vapor Weight Percent						Total
			Benzene	Toluene	Ethyl-Benzene	Xylenes	Hexane	MTBE	
	Transmix, Gasln, Jet A, Diesel and low VP	N/A	16.70%	9.84%	1.94%	4.45%	9.17%	1.30%	
	Jet A, Diesel and similar low VP	N/A	16.70%	9.84%	1.94%	4.45%	9.17%	0.00%	
	Nat. Gasln, Gasln, Jet A, Diesel and low VP	N/A	0.90%	1.30%	0.10%	0.50%	1.60%	1.30%	
		HAP Emissions (tons/yr)							
5101	Nat. Gasln, Gasln, Jet A, Diesel and low VP	2.67	0.02	0.03	0.00	0.01	0.04	0.03	0.15
5102	Jet A, Diesel and similar low VP	1.44	0.24	0.14	0.03	0.06	0.13	0.00	0.61
5103	Nat. Gasln, Gasln, Jet A, Diesel and low VP	2.67	0.02	0.03	0.00	0.01	0.04	0.03	0.15
5104	Jet A, Diesel and similar low VP	1.44	0.24	0.14	0.03	0.06	0.13	0.00	0.61
5105	Nat. Gasln, Gasln, Jet A, Diesel and low VP	2.66	0.02	0.03	0.00	0.01	0.04	0.03	0.15
5161	Transmix, Gasln, Jet A, Diesel and low VP	0.45	0.07	0.04	0.01	0.02	0.04	0.01	0.19
5162	Transmix, Gasln, Jet A, Diesel and low VP	0.45	0.07	0.04	0.01	0.02	0.04	0.01	0.19
Total		11.77	0.70	0.48	0.08	0.21	0.47	0.12	2.06

Notes:

All storage tank emissions estimated using USEPA's Tanks 4.09b software program and are based on the estimated maximum annual throughput for each tank.

To determine the worst case emissions for Diesel (Fuel oil) and Jet A service, the highest vapor wt% for each service was used to determine the emissions.

The higher vapor wt% for all HAPs was higher for Fuel Oil than Jet A except Hexane where the Jet A wt% was used.

Transmix is a blend of all fuels, but the highest vapor wt% for Fuel Oil, Jet A or gasoline was used.

MTBE is sometimes used to oxygenate fuel, vapor wt% is based on TEPPCO's highest % in the pipelines at the origination point in Texas. No pure MTBE is handled at Indianapolis Terminal.